

# MIC400 Stainless Steel PTZ Camera



- ▶ **Grade 316 stainless steel construction**
- ▶ **Rated to an industry leading IP68**
- ▶ **Host of mounting and viewing options**
- ▶ **Integrated heater and wiper**
- ▶ **Multi-protocol operation**

The MIC400 stainless steel range has been designed to offer an extremely reliable, robust and high quality surveillance solution for security applications that demand the very best performance, regardless of the installed environment. Precision engineered to exacting standards, the range offers numerous benefits over the use of traditional dome and PTZ cameras with a range of options available to ensure a best-fit solution is achieved.

Rated to an industry leading IP68, the vandal resistant grade 316 stainless steel camera housing has enhanced corrosion resistant properties to provide the ultimate protection in the harshest of environments, including marine applications where the salt content of the air is especially high and constant exposure can dramatically reduce the life span of traditional camera and dome units.

Featuring an optically perfectly flat viewing window and integrated wiper, the MIC400 stainless steel range is able to capture razor sharp images in even the most demanding conditions with brushless motor technology ensuring ultra-reliable, whisper-quiet operation while groundbreaking resolver technology provides pin-point accuracy and affords the user full 360° continuous rotation pan and an unprecedented 320° tilt control.

A choice of true day/night camera modules, offering up to 36x optical zoom (12x digital), coupled with flexible upright, inverted or canted mounting capability, allows the perfect field of view to be achieved every time.

## Functions

### **Grade 316 stainless steel construction**

Anti-corrosion stainless steel construction ensures long-life and reliable operation in demanding conditions such as harsh coastal environments.

### **Rated to an industry leading IP68**

Zero dust ingress and the ability to withstand sustained periods of immersion under water, the MIC400 stainless steel range is perfectly suited for installation in the most unforgiving environments.

### **Host of mounting and viewing options**

Faultless operation either upright or inverted gives the user a host of mounting and viewing possibilities. A canted option is provided for upright pole-mounted applications, allowing the base of the pole to be viewed.

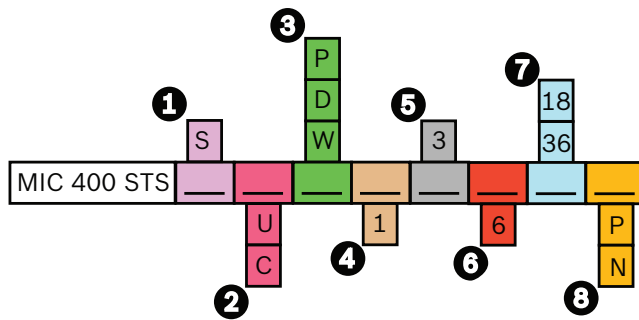
### **Integrated heater and wiper**

Hot or cold, rain or shine – regardless of the weather the MIC400 stainless steel range is able to capture the highest possible quality image all year around thanks to its integrated wiper and heater.

### **Multi-protocol operation**

Compatible with virtually any control equipment available today, the MIC400 stainless steel range is able to seamlessly integrate with the vast majority of security systems.

## Installation/Configuration Notes



### Ordering Guide

#### 1 Colors

S Stainless steel

#### 2 Configuration

U Upright

C Canted

#### 3 Protocol

P Bosch

W Forward Vision

D Pelco P/D

#### 4 Wiper

1 Wiper fitted

#### 5 Heater

3 Heater fitted

#### 6 Privacy

6 No privacy

#### 7 Camera Zoom Ratio

18 18:1

36 36:1

#### 8 Video Standard

P PAL

N NTSC

## Technical Specifications

### Camera Module

Image sensor	¼-inch EXview CCD
Picture elements	380 K NTSC / 440 K PAL (WIDE)
Horizontal resolution	470 TVL NTSC / 460 TVL PAL (WIDE)
Filter	Automatic mechanical IR cut filter
Focus system	Auto or manual
Iris	Auto or manual with slow shutter integration modes
Synchronization	Internal / External (V-Lock)
Recommended illumination	100 to 100,000 lx
Signal/Noise ratio	50 dB or more
Back Light Compensation (BLC)	On/Off

White balance	Automatic
Automatic Gain Control (AGC)	-3 to -28 dB, 2 dB steps
Aperture control	16 Steps

### 18x optical zoom module

Lens	F=4.1 mm (WIDE) to 73.8 mm (TELE), F1.4 to F3.0
Zoom	18x optical (12x digital)
Angle of view	48° (WIDE end) to 2.8° (TELE end)
Minimum illumination	0.7 lux (F1.4, 1/60s NTSC, 1/50s PAL), 0.11 lux (F1.4, 1/4s NTSC, 1/3s PAL), 0.01 lux or less (F1.4, 1/4s NTSC, 1/3s PAL, ICR ON)
Shutter speed	1/1 to 1/10,000s (22 steps) NTSC, PAL

### 36x optical zoom module

Lens	F=3.4 mm (WIDE) to 122.4 mm (TELE), F1.6 to F4.5
Zoom	36x optical (12x digital)
Angle of view	57.8° (WIDE end) to 1.7° (TELE end)
Minimum illumination	1.4 lux (1/60s NTSC, 1/50s PAL), 0.1 lux (1/4s NTSC, 1/3s PAL), 0.01 lux or less (1/4s NTSC, 1/3s PAL, ICR ON)
Shutter speed	1/4 to 1/10,000s (20 steps) NTSC, 1/3 to 1/10,000s (20 steps) PAL

### Operational\*

Auto flip	Yes
Manual flip	Yes
Presets	64 telemetry presets utilizing resolver technology (using FV protocol, 10 camera set-up presets to allow ANPR, color correction etc.)
Preset tours	6 tours each with up to 32 presets
Sector titles	Yes (64 sectors) 20 characters per title
Preset titles	20 character caption for each of the 64 presets
Home position	Yes (preset 1 or tour)

### Communication and Protocols

Communication	RS485 / RS422
Control protocol	Bosch, Pelco P/D or FV protocol cameras available. Other protocols supported. Please consult separate protocol list for available options. Bosch camera requires Biphase to RS485 converter (MIC-BP4) to be installed in to the power supply (available separately)

### Connectivity

Video	Co-axial via composite cable
Telemetry	Twisted pair. Simplex, half and full duplex operation via composite cable
Power	Via composite cable

**Alarms**

Alarm inputs	1 tamper input (additional inputs possible with optional alarm card in PSU)
Alarm communication	Tamper switch (ground connection)

**Mechanical**

Drive unit	Integral pan/tilt motor drive
Pan angle	360° continuous rotation
Pan speed	Up to 90° per second (variable)
Tilt angle	320°
Tilt speed	0.2° to 90° per second (variable)
Speed control	Closed loop electronics
Preset accuracy	Better than 0.08°
Proportional P/T to zoom	Yes

**Physical**

Construction material	Grade 316 stainless steel
Viewing window	Tempered flat glass
Standard colors	Stainless steel (no color options)
Standard finish	Stainless steel (no finish options)
Dimensions	205(W) x 360(H) x 165(D)mm (upright and inverted)
Weight	16.5Kg (including 4-inch PCD base)

**Environmental**

Operational temperature	-30°C to +50°C
Weatherproofing	NEMA 4x / IP68

**Electrical**

Input voltage	15 VAC / 18 VDC
Power consumption	25.2 W max. 45.2 W max. with heaters ON.

**Available Options**

Configurations available	Upright mount or upright canted at 45° mount options (inverted mount configurable through software).
Camera module	18x camera module or 36x camera module
Camera color system	NTSC or PAL
Telemetry control card	Built-in
Washer	Optional, (only bracket and nozzle supplied)
Washer pump drive card	Optional, fitted in PSU
Alarm card	Optional, fitted in PSU

*\*functions available when used with the Forward Vision protocol, other protocols may vary.*

**Ordering Information**

<b>MIC400STS UW13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, upright, FV Protocol, wiper and heater fitted, PAL	<b>MIC400STS UW13618P</b>
<b>MIC400STS UW13636P MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, upright, FV Protocol, wiper and heater fitted, PAL	<b>MIC400STS UW13636P</b>
<b>MIC400STS UD13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, upright, Pelco Protocol, wiper and heater fitted, PAL	<b>MIC400STS UD13618P</b>
<b>MIC400STS UD13618N MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, upright, Pelco Protocol, wiper and heater fitted, NTSC	<b>MIC400STS UD13618N</b>
<b>MIC400STS UD13636P MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, upright, Pelco Protocol, wiper and heater fitted, PAL	<b>MIC400STS UD13636P</b>
<b>MIC400STS UD13636N MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, upright, Pelco Protocol, wiper and heater fitted, NTSC	<b>MIC400STS UD13636N</b>
<b>MIC400STS UP13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, upright, Bosch Protocol, wiper and heater fitted, PAL	<b>MIC400STS UP13618P</b>
<b>MIC400STS UP13618N MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, upright, Bosch Protocol, wiper and heater fitted, NTSC	<b>MIC400STS UP13618N</b>
<b>MIC400STS UP13636P MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, upright, Bosch Protocol, wiper and heater fitted, PAL	<b>MIC400STS UP13636P</b>
<b>MIC400STS UP13636N MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, upright, Bosch Protocol, wiper and heater fitted, NTSC	<b>MIC400STS UP13636N</b>
<b>MIC400STSCW13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, canted, FV Protocol, wiper and heater fitted, PAL	<b>MIC400STSCW13618P</b>
<b>MIC400STSCW13636P MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, canted, FV Protocol, wiper and heater fitted, PAL	<b>MIC400STSCW13636P</b>
<b>MIC400STSCD13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, canted, Pelco Protocol, wiper and heater fitted, PAL	<b>MIC400STSCD13618P</b>
<b>MIC400STSCD13618N MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, canted, Pelco Protocol, wiper and heater fitted, NTSC	<b>MIC400STSCD13618N</b>

### Ordering Information

<b>MIC400STSCD13636P MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, canted, Pelco Protocol, wiper and heater fitted, PAL	<b>MIC400STSCD13636P</b>
<b>MIC400STSCD13636N MIC400S</b> MIC 36x Optical zoom, stainless steel, natural finish, canted, Pelco Protocol, wiper and heater fitted, NTSC	<b>MIC400STSCD13636N</b>
<b>MIC400STSCP13618P MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, canted, Bosch Protocol, wiper and heater fitted, PAL	<b>MIC400STSCP13618P</b>
<b>MIC400STSCP13618N MIC400S</b> MIC 18x Optical zoom, stainless steel, natural finish, canted, Bosch Protocol, wiper and heater fitted, NTSC	<b>MIC400STSCP13618N</b>
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